NOTE ON THE GENUS CHONERHINUS OR XENOPTERUS.

BY

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I.

In Dr. Günther's Catalogue of the Fishes in the British Museum, (vol. 8, p. 270, 1870) in the subfamily *Tetrodontina* (which includes the *Tetrodontidæ* and *Diodontidæ*) a genus is admitted with the following data:

2. Xenopterus.

Xenopterus Bibron, Rev. Zool., 1855, p. 281.
Chonerhinus Bleek., Atl. Ichth. Gymnod., p. 77 (not before characterized).

The data thus given are quite misleading, but in almost every year since 1870 there has been some reference to the genus in question in which they have been assumed to be correct. In an important memoir by Dr. Vinciguerra on the Fishes of Burma, just published, and even by Dr. Jordan, *Xenopterus* has been used instead of *Chonerhinus* or *Chonerhinos*. In fact, the only one who has accepted either form of the name except its inventor has been myself.* The reasons why I have used that name rather than *Xenopterus* I will now give, for such are called for in view of the fact that for over twenty years a false light has been followed without any other discovering the truth.

II.

In 1854 Dr. Bleeker, in his "Vijfde Bijdrage tot de Kennis der ichthyologische Fauna van Celebes," proposed a new generic name for the *Tetraodon modestus*† and *T. naritus* and gave diagnoses of four genera into which *Tetraodon* was subdivided by him. The new genus was thus defined: "*Chonerhinos* Blkr. door trechtervormige verdieping ter plaatse der neusopeningen met verhevene randen, lange rug- en aarsvinnen, zigtbare zijlijn en ongekielden rug."

In other words, and in plain English, it is proposed to distinguish *T. modestus* and *T. naritus* generically from *Tetraodon* because there are, in place of the nasal openings, funnel-shaped depressions with raised margins; long dorsal and anal fins; a conspicuous lateral line, and a keelless back.

*"*Chonerhinidæ* Gill, Proc. U. S. Nat. Mus., 1884, p. 123.

†The name "*Chonerhinos modestus*—*Tetr. modestus* Blkr. ib. N. T. 1, p. 16, III 440" occurs in the N. T., v. 7, p. 69.

The diagnosis will be thus seen to be sufficient if not complete and as good as those subsequently given by Bibron and Günther. Dr. Günther could not have noted that "*Chonerhinus*" was "not before characterized" if he had known Bleeker's memoir, which, it is to be borne in mind, is not referred to by him.

In 1855 M. Auguste Duméril published extracts from unpublished MSS. of the late M. Bibron relative to the gymnodont plectognaths, and among them a diagnosis of a genus called *Xénoptère*,* viz:

10° G. *Xénoptère* Bib. (ξένος, étrange, inusité; πτερυξ, nageoires). "Narines en forme de cupule plissée intérieurement.—Des épines sur les côtés de la tête et le ventre seulement. Epiptère et hypoptère beaucoup plus longues que hautes; uroptère arrondie."

Espèce unique: X. Bellangerii Bib.

In 1878 Gill† adopted the name *Xenopterus* and made the genus the type of a subfamily *Xenopterinæ*.

In 1880 Dr. Günther‡ degraded the genus to a subdivision of *Tetrodon*, under which it would only appear as a section.

In 1884 Gill§ recognized the priority of *Chonerhinus* and raised the including group to family rank under the name *Chonerhinidæ*.

In 1886 Jordan and Edwards,‖ with reference to the considerable number of dorsal and anal rays in *Lagocephalus*, expressed the opinion that "this increase in the number of fin rays marks a slight step in the direction of the genus *Xenopterus* (*Chonerhinus*)." They also accepted the "family of *Tetraodontidæ* as including all the Plectognathous fishes in which the teeth in each jaw are coalesced into a bony plate, which in each jaw is divided by a median suture," but restricted the name *Tetraodontinæ* to the *Tetraodontidæ* as limited by me in 1884. They excluded *Xenopterus* from both their subfamilies by the terms of their diagnoses and consequently by implication admitted the subfamily *Xenopterinæ*.

III.

It will thus be seen that in 1855 (1) the name *Xénoptère* was alone given and (2) no *described* type was mentioned. For both reasons, therefore, some naturalists at least (and for the first, President Jordan certainly), if the facts were known, would reject the name.¶ On the other hand, (1) a good Latin name was given by Bleeker, (2) described species were specified, (3) a good generic diagnosis was supplied, and (4) the given name was published before any other. Unquestionably,

* Note sur un travail inédit de Bibron relatif aux Poissons Plectognathes Gymnodonts. . . . <Rev. et Mag. Zoöl., (2,) v. 7, pp. 274–282 (281), 1855.

† Gill, Johnson's Univ. Cycl., v. 4, p. 792.

‡ Günther, Int. Study Fishes, p. 688.

§ Gill, Proc. U. S. Nat. Mus., v. 7, p. 423.

‖ Jordan and Edwards, U. S. Nat. Mus., v. 9, pp. 230–236.

¶ See Jordan and Edwards, Proc. U. S. Nat. Mus., v 9, p. 233.

therefore, the name given by Bleeker (being likewise not preoccupied) must be accepted.

The Latin form of the generic name, *Xenopterus*, was not given till 1857, when Hollard used it in his memorable "Études sur les Gymnodontes," the first memoir in which the genera of a large group of fishes were diagnosed by details drawn from comparative anatomy.

A summary of the facts thus made known is embodied in the following synonymy.

IV.

CHONERHINUS.

SYNONYMY.

=*Chonerhinos* Bleeker, Nat. Tijd. Ned. Indië, v. 7, p. 69 (name only); p. 259 (characterized) 1854.

=*Xénoptère* Bibron, Rev. et Mag. Zoöl. (2), v. 2, p. 281, 1855. (Without reference to a described species.)

=*Xenopterus* Hollard, Ann. Sc. Nat. (4), v. 8, p. 321, 1857. (Cranium of *A. Bellangeri* figured.)

=*Chonerhinus* Bleeker, Atlas Ich. Néerland. Indies, v. 5, pp. 49, 77, 1865.

Tetraodon sp. Richardson.

Tetrodon sp. Bleeker *olim*, Günther, 1880, 1886.

Inasmuch as Bleeker himself corrected *Chonerhinos* to *Chonerhinus*, I have accepted the latter; I am tempted to still further change the name to *Chonorhinus* (in analogy with χωνοείδες), but for the present at least forbear to do so.

V.

In 1839–1841, Johannes Müller, in a note to the third part of his Vergleichende Anatomie der Myxinoiden,* set apart a section of the old genus *Tetraodon*, as follows:

Andere Tetrodon haben keine Spur von Naslöchern und an dieser Stelle einer hautartigen trichterformigen Tentakel, *Chelonodon*, Nob.

No species was mentioned in connection with this notice.

The diagnosis is applicable, so far as it goes, to *Chonerhinus*, and it is quite likely that it was based on that type. It has, however, been accepted for a section including the "*Tetrodon patoca*," "*T. viridipunctatus*," and "*T. Waandersii*," as by Dr. Günther (Cat. Fishes B. M., v. 8, pp. 272, 288), defined as follows:

C. A simple, non-perforate nasal cavity with a fringed edge. Body spiny: *Chelonodon*, Müll.

As I have none of the species mentioned I hold opinion in abeyance.

* Abhandl. Berlin. Akad., 1839, p. 253, 1841.